

WE CLAIM:

1. An x-ray radiator having a rotary bulb tube mounted for rotation in a housing filled with a coolant, said rotary bulb tube being connected by a shaft arrangement having a coupling to a means for rotating the bulb tube.

2. An x-ray radiator according to claim 1, wherein the coupling comprises output disc that can be connected with a first shaft section extending from a rotary bulb tube, a drive disc that is connected to a second shaft section extending from the motor and an electrically insulating intermediate disc connecting the output disc with the drive disc.

3. An x-ray radiator according to Claim 2, where in the intermediate disc is produced from a material selected from plastic and ceramic.

4. An x-ray radiator according to Claim 2, wherein the output disc and the drive disc are formed of a metal.

5. An x-ray radiator according to Claim 2, wherein the coupling has a non-positive connection between the drive disc and the intermediate disc comprising first projections extending from one of the drive disc and the intermediate disc being received in first recesses in the other of the drive disc and intermediate disc, each first recess being fashioned to receive the first projection.

6. An x-ray radiator according to Claim 5, which includes damping means being engaged between the intermediate disc and the drive disc.

7. An x-ray radiator according to Claim 6, wherein the damping means includes pads mounted in one of the drive disc and intermediate disc and engaging sides of each first projection, said pads and first projection being received in said first recess.

8. An x-ray radiator according to Claim 6, wherein the intermediate disc and the damping means are produced from oil resistant materials.

9. An x-ray radiator according to Claim 2, which has a non-positive connection between the output disc and the intermediate disc, said non-positive connection being formed by one of the output disc and intermediate disc having second projections extending therefrom and the other of said output disc and intermediate disc having second recesses fashioned to receive the second projections to form the non-positive connection.

10. An x-ray radiator according to Claim 2, wherein the drive disc has first projections extending therefrom and the intermediate disc has first recesses designed to receive the first projections to form a non-positive connection therebetween, said output disc having second projections and said intermediate disc on a side opposite the side having the first recesses having second recesses fashioned to receive the second projections to form an non-positive connection between the output disc and the intermediate disc.

11. An x-ray radiator according to Claim 10, wherein the drive disc include damping means in the form of pads held on the sides of each first projection and being received in the first recesses of the intermediate disc.

12. An x-ray radiator according to Claim 11, wherein the damping pad on one side of the first projection is connected by an arcuate bridge received in an arcuate recess in the drive disc to a damping pad of an adjacent first projection.

13. An x-ray radiator according to Claim 2, wherein the second shaft section is directed through a gap in housing and provided with a seal.

14. An x-ray radiator according to Claim 13, wherein the seal engages a hub portion of a drive disc of the coupling.

15. An x-ray radiator according to Claim 1, wherein the coupling is surrounded by the housing

16. An x-ray radiator according to Claim 1, wherein the rotary bulb tube includes an anode plate, a first shaft section extending from an external side of the anode plate facing the inside of the housing.